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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,866	12/29/2003	Richard Rivera	TROPIP.041DV1	2806

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EXAMINER

CHAN, KO HUNG

ART UNIT	PAPER NUMBER
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3632

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/747,866	RIVERA, RICHARD	
	Examiner	Art Unit	
	Korie H. Chan	3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 112

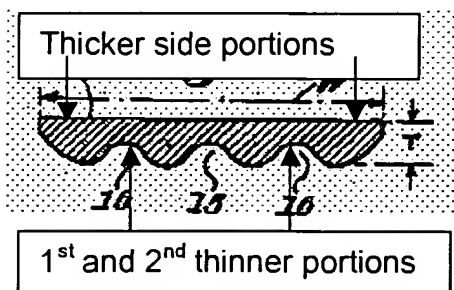
The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 and 16-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant's newly added limitation that the curved segment bend by at least 180 degrees is not supported by original disclosure.

Claim Rejections - 35 USC § 102

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Rowland et al (US patent no. 2,533,511). Rowland discloses a C-shaped spring (figure 14) having longitudinal channels on outer surface and flat inner surface and with first and second adjacent ends (5) having a hole for fastener (F) attachment to a component (D) with thicker side portion (3) and thin center portion (2).



Claim Rejections - 35 USC § 103

Claims 1-10 and 12 –18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderminden, Sr. (US patent no. 5,599,064) in view of either Rowland et al (US patent no. 2,533,511) or Mies (US patent no. 2,283,755). Vanderminden discloses two C-shaped springs (25) connected by a horizontal support ((29) with downward post (22) wherein the C-spring is made of aluminum (Col. 2, line 52). However, Vanderminden does not disclose providing channel or two channels on the C-shaped spring. Rowland teaches a C-shaped spring (figure 14) having longitudinal channels (15, 16) on outer surface and flat inner surface and with first and second adjacent ends (5) and with thicker side portion (side of figure 14) and thin center portion (15) such that stress on the spring under loading are substantially constant throughout the major portion of the spring (Col. 3, lines 1-6). Mies teaches a C-shaped spring (figure 11-14) where there can be plurality of ribs provided (page 2, col. 2, lines 65-58) such that a plurality of channels would inherently be in between the ribs. It would have been obvious to one of ordinary skill in the art to have modify the springs of Vanderminden such that channel or channels are provided for even distribution of stress of the spring under loading as taught to be desirable by Rowland or Mies. Regarding claim 12, it would have been an obvious matter of design choice to have the side portion 30% thicker than the center portion since applicant has not disclose such

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specific dimension is critical or of particular advantage. Moreover, it appears other percentage of thickness would perform as well.

Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanderminden, Sr. (US patent no. 5,599,064) in view of Rowland et al (US patent no. 2,533,511) or Mies (US patent no. 2,283,755) as applied above, and further in view of Holmstrom (US patent no. 3,297,360). Vanderminden and Rowland combined or Vanderminden and Mies combined disclosed all the claimed features of applicant's invention except for the hole in the first end of elongate member for attachment to component. To attach support to seat member by providing hole in the elongate member for receiving fastener is old and well-known in the art. Holmstrom teaches in a C-shaped spring support having holes (figure 2) at first end for receiving fastener for attachment to the seat member (figure 5). It would have been obvious to one of ordinary skill in the art to provide hole in the first end of C-shaped spring of Vanderminden and Rowland combined for receiving fastener for attachment to the seat member as taught by Holmstrom. Regarding claim 19, the method step of making the spring would have been obvious given the spring of Vanderminden, Rowland, and Holmstrom combined.

Response to Arguments

Applicant's arguments filed November 2, 2004 have been fully considered but they are not persuasive. In response to applicant's argument that there is no suggestion to combine the references of Vanderminden, Sr. and Rowland, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of

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the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is well-known in the art of leaf springs to provide ribs in conjunction with grooves to evenly distribute stress. Rowland discloses such advantage and so does the plurality of references cited of record such as Dixon, Berry, etc..... The motivation to combine is disclosed specifically in Rowland to distribute stress.

Rowland's ribs and channels are provided on the outer side of the surface of bend as does applicant. Applicant's argument that applicant's channel on the outer surface shifts the neutral axis toward the compression side is not understood. Rowland's arrangement of the grooves or channels is also arranged on the outer surface as applicant.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

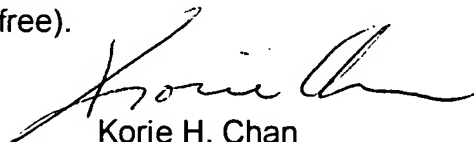
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Korie H. Chan whose telephone number is 703-305-8079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leslie Braun can be reached on 703-308-2156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Korie H. Chan
Primary Examiner
Art Unit 3632

khc
January 19, 2005